January 20, 2010

Gary M. Levin, CEO Levin-Richmond Terminal Corporation 402 Wright Avenue Richmond, CA 94804

Re: Review of Operations & Maintenance Plan for the Upper Capping System of the Former United Heckathorn Site: Request for Revision to O&M Monitoring Metrics

Dear Mr. Levin:

EPA has conducted a review of The Operations & Maintenance Plan for the Upper Capping System of the Former United Heckathorn Site (UH O&M Plan) (PES, 1998) and reports submitted as for O&M Annual compliance submittals (TES, 2007; 2008; 2009). As you are aware, adequately addressing operation and maintenance (O&M) issues throughout the life of a Superfund remedy is critical to the successful implementation of the Superfund program. O&M measures are designed to maintain the remedy at a site to ensure that the remedy remains protective of human health and the environment (EPA, 2001).

The UH O&M Plan outlines and details specific activities related to inspections, monitoring and maintenance of the upland cap, which are reported annually as stipulated by the USEPA Consent Decree. Our review of the O&M Plan and Annual reports found that appropriate and relavent best management practices are prescribed. However, aspects of the O&M Plan and Annual Report lack clearly defined metrics by which inspections are performed and measured to verify the integrity and sufficient maintenance of the cap and associated storm water controls. Specifically the following concerns were noted:

- Although there is a visual inspection of the concrete cap and annual reporting notes the
 presence of cracks, there appear to be no tracking of cracks from year to year, no
 measurement of differential movement within concrete cap surface and/or progress
 mapping of cracks or documentation on applications and locations of grout sealant
 and/or the application of maintenance or repairs.
- There are no quantitative measurements to document that the cap is not undergoing significant differential settlement and or displacement which could compromise the cap as well suggest compromise within the underlying storm water collection system.
- Although the O&M Plan specifies that storm water samples be tested under EPA
 Method 8080 (This method should now reference EPA Method 8081), all storm water
 samples are not consistently tested under this method. The 2007 report limited DDT and
 Dieldrin testing to the first flush event. The 2008 Annual report limited testing to State
 Discharge Permit criteria and did not include testing for Site constituents DDT and
 dieldrin.

- There have been no volumetric measurements or pesticide testing of sediment removed from the storm drain interceptors. Interceptors are purged and cleaned on a periodic, as-needed, basis. In addition, sediment removed has not historically been tested for DDT and dieldrin prior to disposal.
- There are no prescribed means to verify the integrity of underground drainage systems
 that underlie the site. Recent sampling of offsite storm drain manholes showed elevated
 levels of DDT and dieldrin exist in the storm drain system. This finding may suggest a
 compromise in the piping structure, which could allow material under the cap to exit the
 site, or it could suggest tidal wash of suspended sediment from the Channel upstream
 into existing storm drain structures.

Recommendations

EPA requests the following amendments be implemented to the current O&M Plan and Annual Reporting documentation:

- Perform annual inspections of the cap under the auspices of a registered engineer and document cracks, maintenance, and repairs on a baseline map which is updated annually.
- Conduct a topographic survey the cap surface every 3 to 5 years to document that the cap is not undergoing significant differential settlement which could ultimately impact its integrity. Compare subsequent surveys with a baseline survey to identify areas of differential movement.
- Collect, quantify, and analyze accumulated sediment (under EPA Method 8081) that is removed from storm drain interceptors on site, and include this information in annual reporting documentation. The volume of sediment removed should be measured and recorded, to monitor the effectiveness of the housekeeping and as a way to verify the engineering controls practiced at the site. Analytical testing will support verifying the integrity of stormwater collection systems.
- Conduct underground videoscoping or other equivalent methods to verify the competency of the underground storm water collection and discharge structures that underlie the site every 3 to 5 years, including the portion of the storm drain structure that underlies the site and discharges to the Lauritzen Channel.

We appreciate your compliance with these concerns. Please contact me by email at <u>Lin.Sharon@epamail.epa.gov</u> or by phone at (415) 972-3446, or Julie Spahn with CH2MHILL (EPA's contractor) by email at <u>Julia.spahn@ch2m.com</u> or by phone at (510) 552-8235

Sincerely,

Sharon Lin, P.E. Remedial Project Manager EPA Region 9 Superfund Division 75 Hawthorne Street (SFD-8-2) San Francisco, CA 94105

cc: Julie Spahn, CH2M HILL, Inc.

References

PES Environmental, Inc. 1998. Operations and Maintenance Plan Upland Capping System Former United Heckathorn Site Richmond, California. April.

Environmental Technical Services, 2009. 2008 – 2009 Annual Report Documenting the Implementation of the Operations and Maintenance Plan. July.

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USEPA, 2001. Operation and Maintenance in the Superfund Program. OSWER 9200.1-37FS EPA 540-F-01-004. May